Maryland Historical Trust

Maryland Inventory of Historic Properties Number: CAR-292

Name: #5003 / MD 313 over Long Marsh Ditch

The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridged received the following determination of eligibly.

MARYLAND HISTORICAL TRUST

Eligibility Recommended _____ Eligibility Not Recommended ___X___

Criteria: ____A ____B ____C ____D Considerations: ___A ___B ___C ___D ___E ___F ___G __None

Comments: _____

_____

_____

Reviewer, OPS: __Anne E. Bruder_____ Date: __3 April 2001_____

Reviewer, NR Program: _Peter E. Kurtze_____ Date: ___3 April 2001_____

MARYLAND INVENTORY OF HISTORIC PROPERTIES **MHT NO. CAR-292**
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION
MARYLAND HISTORICAL TRUST

NAME AND SHA NO.: 5003

LOCATION
Road Name and Number: MD 313 over Long Marsh Ditch
City/Town: Baltimore Corner X vicinity
County: Caroline

Ownership: X State _ County _ Municipal _ Other

Bridge projects over: _ Road _ Railway X Water _ Land

Is bridge located within designated district?: _ yes X no
___ NR listed district _ NR determined eligible district
___ locally designated _ other
Name of District _

BRIDGE TYPE

__ Timber Bridge
__ Beam Bridge __ Truss-Covered __ Trestle __ Timber-and-Concrete

__ Stone Arch Bridge

__ Metal Truss Bridge

__ Moveable Bridge
__ Swing __ Bascule Single Leaf __ Bascule Multiple Leaf
__ Vertical Lift __ Retractile __ Pontoon

Metal Girder
__ Rolled Girder __ Rolled Girder Concrete Encased
__ Plate Girder __ Plate Girder Concrete Encased

__ Metal Suspension

__ Metal Arch

__ Metal Cantilever

X Concrete
_ Concrete Arch X Concrete Slab X Concrete Beam _ Rigid Frame
_ Other Type Name ___

DESCRIPTION

Describe the Setting:

Bridge 5003 carries MD 313 over Long Marsh Ditch at the boundary between Caroline and Queen Anne's counties. MD 313 runs in a generally east-west direction at this location; Long Marsh Ditch flows north-south. Several houses are visible from the bridge, but the property adjacent to the bridge is primarily agricultural. Bridge 5003 is located within the Piedmont physiographic province which is characterized by variegated topography and hilly terrain created by waterways cutting through the valleys.

Describe the Superstructure and Substructure:
(Discuss points identified in Context Addendum, Section C)

Bridge 5003 is a 3-span structure consisting of two concrete girder spans and one concrete slab span with a total bridge length of 85 ±. A 1958 inspection report indicates that clear span lengths are 21', 25', and 19'-8", however, this report does not specify which measurements are for the concrete beam spans or the concrete slab span. The bridge carries two lanes of traffic and has a clear roadway width of 22' with 6' shoulders. Metal W-beam guardrails are connected to the solid concrete parapets. The parapets feature inset rectangular panels and concrete caps.

The substructure of this bridge consists of concrete abutments, concrete and metal piers, and concrete wing walls. When the bridge was lengthened circa 1929, one abutment was adapted for use as a pier. Underpinning in 1962 and emergency repairs to the piers and the southern span in May 1990 resulted in the use of steel bents for reinforcement of these elements.

Minor structural problems such as cracking of the parapets and the deck were mentioned and later repaired according to inspection reports dating from 1972 and 1976. Serious defects in the superstructure - cracking and spalling of the abutments, wing walls, piers, girders, parapets, and deck, as well as exposed and rusted reinforcing bars - were indicated in inspection reports from 1978 and 1980.

Structural defects noted in a 1994 inspection report included deck deterioration, major spalling of concrete in the southeast wing wall, scour at the nose of pier 1, major undermining of the south approach roadway, and deterioration of the parapets.

A survey of historic concrete beam bridges undertaken by the Maryland State Highway Administration in the Fall of 1995 identified 113 bridges of that type located throughout the state. Nine percent (10) of that total were triple-span bridges; 37 bridges (33%) were multiple span.

Discuss major alterations:

The concrete girder spans were constructed in 1912, and the concrete slab was added in 1929 to lengthen the structure (Pier 2 was apparently Abutment B at one time). Steel bents were used to underpin the bridge in 1962 and 1990. This bridge is on tour for replacement but as of May 1994 it has not been scheduled

HISTORY

When Built: 1912
Why Built: Unknown
Who Built: State Roads Commission of Maryland
Who Designed: Unknown
Why Altered: Lengthening of the bridge in 1929; deterioration in 1962 and 1990.
Was this bridge built as part of an organized bridge building campaign?: No

This bridge was built during the Good Roads Movement era but was not one of the primary corridors slated for improvement.

SURVEYOR ANALYSIS

This bridge may have NR significance for association with:

_ A (Events) _ B (Person) _ C (Engineering/Architectural Character)

Was this bridge constructed in response to significant events in Maryland or local history?

The improvement of Caroline County roads most likely resulted from several events that occurred during the first three decades of the twentieth century. The original Good Roads movement was aimed toward improving the primary routes through the state as well as connecting roads between counties. A later impact of this crusade included the widening, straightening, and grading of secondary roads, and construction of new bridges to carry these rebuilt roads. Further, the rapid increase of automobile, truck, and bus traffic prompted the replacement of the existing narrow and weak bridges with new, wider, and stronger concrete structures. As time, labor, and money-saving plans created by the State Roads Commission (SRC), the establishment of district engineering offices during the 1910s and the development of standardized bridge designs also aided in the construction of modern bridges throughout the state. During the 1920s, emphasis of the SRC was on improving safety and comfort of main routes while building up the secondary roads and the farm-to-market network of feeder roads. By the 1930s, bridges believed to be adequate when initial road reconstruction was undertaken became unacceptable for modern traffic and many new structures were constructed.

When the bridge was built, and/or given a major alteration, did it have a significant impact on the growth and development of the area?

No, the construction of this bridge did not have a significant impact on the growth or development of this portion of Caroline County.

Is the bridge located in an area which may be eligible for historic designation, and would the bridge add or detract from the historic and visual character of the possible district?

No, this bridge is not located in area which is potentially eligible as a historic district.

Is the bridge a significant example of its type?

No. This bridge has received too many alterations and remains in poor condition for the structure to serve as a significant example of its type.

Does the bridge retain integrity of the important elements described in the Context Addendum?

No. Due to the alterations and the poor condition of the wing walls, deck, abutments, and parapets, the bridge does not retain integrity of its character defining elements.

Is the bridge a significant example of the work of the manufacturer, designer, and/or engineer, and why?

No, this bridge does not stand as a significant example of the work of the manufacturer, designer, and/or engineer. This bridge was most likely built to standard state specifications, which corresponded to the structure's span length and year.

Should this bridge be given further study before significance analysis is made, and why?

No, this bridge should not receive further study.

BIBLIOGRAPHY

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Johnson, A.N.
1903 *Third Report on the Highways of Maryland (1902-1903).* The Johns Hopkins Press, Baltimore.

LeViness, Charles T.
1958 *A History of Road Building in Maryland.* State Roads Commission of Maryland, Baltimore.

Maryland State Highway Administration
1990 As-built drawings. Located in the files of the Office of Bridge Development, Maryland State Highway Administration, Baltimore.

1987-93 Bridge inspection reports. Located in the files of the Office of Bridge Development, Maryland State Highway Administration, Baltimore.

P.A.C. Spero and Company and Louis Berger and Associates, Inc.
1994 *Historic Bridges in Maryland: Historic Context Report.* Prepared for Maryland State Highway Administration, Maryland State Department of Transportation, Baltimore.

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1929-62 As-built drawings. Located in the files of the Office of Bridge Development, Maryland State Highway Administration, Baltimore.

1958-80 Bridge inspection reports. Located in the files of the Office of Bridge Development, Maryland State Highway Administration, Baltimore.

SURVEYOR INFORMATION

Name: Margaret A. Bishop and Michelle M. Lupien **Date:** 13 May 1996
Organization: KCI Technologies, Inc. **Telephone:** (717) 691-1340
Address: 5001 Louise Dr., Suite 201
Mechanicsburg, PA 17055

Maryland Historic Highway Bridges
Bridge Type CONCRETE BEAM
Map CENTREVILLE, E-15
County CAROLINE
Bridge # and Name 5003, MD313
OVER LONG MARSH DITCH

CAR-292

307

CAR-292

CAROLINE COUNTY

MATT HICHSON

3-16-95

~~MARYLAND SHPO~~ SHA

BRIDGE 5003, LOOKING SE

1 OF 6


Welcome to
Queen Anne's
County

CAR-292

CAROLINE COUNTY

MATT HICKSON

3-16-95

~~MARYLAND SHPO~~ SHA

BRIDGE 5003, LOOKING NW

2 OF 6

CAR-292
CAROLINE COUNTY
MATT HICKSON
31695
~~MARYLAND SHPO~~ SHA
BRIDGE 5003, LOOKING UPSTREAM (NE)
3 OF 6


Welcome
to
Queen Anne's
County

CAR-292
CAROLINE COUNTY
MATT HICKSON
3-16-95
~~MARYLAND SHPO~~ SHA
BRIDGE 5003, ABUT. & PIER REPAIRS (NW END)
4 OF 6


5003

CAR-292
CAROLINE COUNTY
MATT HICKSON
3-16-95
~~MARYLAND SHPO~~ SHA
BRIDGE 5003, SE SPAN ADDED SUPPORT
5 OF 6

CAR-292
CAROLINE COUNTY
MATT HICKSON
3-16-95
~~MARYLAND SHPO~~ SHA
BRIDGE 5003, LOOKING DOWNSTREAM (SE)
6 OF 6

9603497

INDIVIDUAL PROPERTY/DISTRICT
MARYLAND HISTORICAL TRUST
INTERNAL NR-ELIGIBILITY REVIEW FORM

Property/District Name: Bridge No.5003 Survey Number: CAR-292

Project: Repairs, MD 313 over Long Marsh Ditch Agency: SHA

Site visit by MHT Staff: X no ___ yes Name _____ Date _____

Eligibility recommended ____ Eligibility **not** recommended X

Criteria: ___A ___B ___C ___D Considerations: ___A ___B ___C ___D ___E ___F ___G ___None

Justification for decision: (Use continuation sheet if necessary and attach map)

Bridge No. 5003 is not eligible for the Maryland Register of Historic Properties. The 1912 two span concrete beam bridge was lengthened in 1929 with a concrete slab span. This composite bridge was subsequently altered in 1968 and again in 1990 with repairs to correct structural problems. The bridge today is reinforced with steel bents and has areas of substantial spalling and deterioration. Therefore, we believe the bridge no longer retains sufficient integrity to merit inclusion in the Maryland Register under Criterion C. It has no known association with significant events or people and no known information value, and thus is unlikely to be eligible under Criteria A, B or D. Lastly, it is not located in a known historic district.

On October 4, 1995, the interagency bridge review committee determined the bridge to be neligible for the National Register of Historic Places

Documentation on the property/district is presented in: Project File, Maryland Inventory Form CAR-292

Prepared by: Margaret Bishop & Michelle Lupien, KCI for SHA

Elizabeth Hannold
Reviewer, Office of Preservation Services

November 12, 1996
Date

NR program concurrence: X yes ___ no ___ not applicable

Peter E. Kurtze
Reviewer, NR program

11/12/96
Date

Survey No. CAR-292

MARYLAND COMPREHENSIVE HISTORIC PRESERVATION PLAN DATA - HISTORIC CONTEXT

I. Geographic Region:

X	Eastern Shore	(all Eastern Shore counties, and Cecil)
	Western Shore	(Anne Arundel, Calvert, Charles, Prince George's and St. Mary's)
	Piedmont	(Baltimore City, Baltimore, Carroll, Frederick, Harford, Howard, Montgomery)
	Western Maryland	(Allegany, Garrett and Washington)

II. Chronological/Developmental Periods:

	Paleo-Indian	10000-7500 B.C.
	Early Archaic	7500-6000 B.C.
	Middle Archaic	6000-4000 B.C.
	Late Archaic	4000-2000 B.C.
	Early Woodland	2000-500 B.C.
	Middle Woodland	500 B.C. - A.D. 900
	Late Woodland/Archaic	A.D. 900-1600
	Contact and Settlement	A.D. 1570-1750
	Rural Agrarian Intensification	A.D. 1680-1815
	Agricultural-Industrial Transition	A.D. 1815-1870
X	Industrial/Urban Dominance	A.D. 1870-1930
	Modern Period	A.D. 1930-Present
	Unknown Period (___ prehistoric	___ historic)

III. Prehistoric Period Themes:

	Subsistence
	Settlement
	Political
	Demographic
	Religion
	Technology
	Environmental Adaption

IV. Historic Period Themes:

	Agriculture
X	Architecture, Landscape Architecture, and Community Planning
	Economic (Commercial and Industrial)
	Government/Law
	Military
	Religion
	Social/Educational/Cultural
X	Transportation

V. Resource Type:

Category: Structure

Historic Environment: rural

Historic Function(s) and Use(s): transportation-vehicular

Known Design Source: State Roads Commission